

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,157	06/27/2003	Hai Jiang	7873	
	590 04/20/2005		EXAMINER	
Hai Jiang 46710 Crawfor	d S+ #6	LUU, PHO M		
Fremont, CA 94539			ART UNIT	PAPER NUMBER
			2824	
			DATE MAILED: 04/20/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

			11.13			
	Application No.	Applicant(s)				
	10/609,157	JIANG, HAI				
Office Action Summary	Examiner	Art Unit				
	Pho M. Luu	2824				
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with	1 the correspondence addres	is			
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	1. 1.136(a). In no event, however, may a repepty within the statutory minimum of thirty and will expire SIX (6) MONTH to the cause the application to become ABA	ply be timely filed (30) days will be considered timely. HS from the mailing date of this community. NDONED (35 U.S.C. § 133).	nication.			
Status						
1) Responsive to communication(s) filed on						
· · · · · · · · · · · · · · · · · · ·	nis action is non-final.					
,	·— · · · · · · · · · · · · · · · · · ·					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>21-31</u> is/are pending in the applicating 4a) Of the above claim(s) is/are withdrest 5)□ Claim(s) is/are allowed. 6)□ Claim(s) is/are rejected. 7)□ Claim(s) is/are objected to. 8)⊠ Claim(s) <u>21-31</u> are subject to restriction and/or	rawn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examir	ner.					
10)☐ The drawing(s) filed on is/are: a)☐ ac	ccepted or b) objected to b	y the Examiner.	•			
Applicant may not request that any objection to the	•	` '				
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the E	examiner. Note the attached	Office Action or form PTO-13	52.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Burea * See the attached detailed Office action for a lis	nts have been received. nts have been received in Ap iority documents have been re eau (PCT Rule 17.2(a)).	oplication No received in this National Stag	ge			
	7. 01 1110 001 11100 00p.02 11011	, Joon Ga.				
Attachment(s) 1) D Notice of References Cited (PTO-892)	4) 🔲 Interview Su	······· (DTO 442)				
2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/	/Mail Date				
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 	8) 5) Notice of Info 6) Other:	ormal Patent Application (PTO-152) -)			

Application/Control Number: 10/609,157 Page 2

Art Unit: 2824

DETAILED ACTION

1. This office action acknowledges receipt of the following items from the Applicant:

- -Supplemental Response to restriction filed on 2/04/05.
- -Claims 1-20 had been canceled.
- -Claims 21-31 are newly added.
- -Claims 21-31 are pending in the application.

Election/Restrictions

- 2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 21-27, drawn to a phase change memory device, classified in class 365, subclass 148.
 - Claims 28-31, drawn to a programming metallization cell memory
 (PMCm), classified in class 365, subclass 153.
- 3. The inventions are distinct, each from the other because of the following reasons:

 Inventions II and I are related as subcombinations disclosed as usable together
 in a single combination. The subcombinations are distinct from each other if they are
 shown to be separately usable. In the instant case, invention II has separate utility such

as claims do not require thin metal layer. See MPEP § 806.05(d).

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Application/Control Number: 10/609,157 Page 3

Art Unit: 2824

5. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

- 6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 7. A telephone call was made to Hai Jiang on 11 April 2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Pho M. Luu whose telephone number is 571.272.1876. The examiner can normally be reached on M-F 8:00AM – 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Richard Elms, can be reached on 571.272.1869. The official fax number for

Art Unit: 2824

the organization where this application or proceeding is assigned is 703.872.9306 for all official communications.

Page 4

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PML

11 April 2005